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| 10/608,703 | 06/27/2003 | Jihad J. Khoury | 02-665 | 9675 |

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EXAMINER

BINDA, GREGORY JOHN

| ART UNIT | PAPER NUMBER |
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3679

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,703

Applicant(s)

KHOURY, JIHAD J.

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-17 and 20-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 and 20-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 11/15/04 & 8/18/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

2. Replacement drawings were received on November 15, 2004. The changes in these drawings are approved.

3. The drawings are objected to because:

a. The drawings fail to show every feature of the invention specified in the claims.

Therefore, the limitations in claim 16, lines 3 & 4 must be shown or the feature(s)

canceled from the claim(s). No new matter should be entered.

b. Fig. 1 should include reference numerals 52 and 53.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement

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Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for the limitations in claim 16, lines 3 & 4.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-17 & 20-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the following limitations are supported, nor does there appear to be a written description of the limitations in the application as originally filed.

a. Claim 1, lines 4 & 5: “a rotating shaft . . . being in contact with the driven member”

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- b. Claim 11, lines 5 & 6: “a rotating shaft . . . being in contact with the rotor”
- c. Claim 8, line 6, “which are parallel to one another”
- d. Claims 20-22: all limitations therein

8. Claims 8-10, 21 & 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 8, line 6 recites the limitation “which are parallel to one another” but it is not clear which of the previously recited elements are parallel to each other.
- b. Claims 21 & 22 each recite the limitation “including two planar contact areas”. It is not clear if these planar contact areas are in addition to, or are inclusive with, the previously recited planar contact area (see claims 1 & 11, lines last).

Claim Rejections - 35 USC § 102

9. Claims 1, 2, 4-9, 11, 12 & 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Tang, US 6,311,943. Figs. 2 & 3 show a pump comprising a pump casing 40 and a rotational coupling. Figs. 2 & 3 show the rotational coupling comprising: a driven member/rotor 43 including an inner surface that defines an opening 44 and includes contact surfaces 46; a rotating shaft 20 received in the opening of the driven member; a cylindrical pin 36 being operable to couple the rotor to the rotating shaft, and including drive surfaces 34 of shoes 32 connected to, but separated a radial distance from the rotating shaft; and the drive surfaces and contact surfaces being in contact over a planar contact area. The shoes 32 have a rectangular cross section. Fig. 4

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shows the rotating shaft 20 is in contact with the driven member/rotor 43. Fig. 3 shows that each drive surface 34 of a shoe 32 is parallel with a respective contact surface 46.

10. Claims 1, 3, 6, 8, 9 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto, US 6,196,802. Fig. 1 shows a pump comprising a pump casing 1 and a rotational coupling. Figs. 4 & 5 show the rotational coupling comprising: a driven member/rotor 10, 11, 13 including an inner surface that defines an opening and includes contact surfaces; a rotating shaft 8 received in the opening of the driven member; a coupling 30 being operable to couple the rotor to the rotating shaft, and including drive surfaces of shoes 33 connected to, but separated a radial distance from the rotating shaft; and the drive surfaces and contact surfaces being in contact over a planar contact area. In col. 1, lines 48-55, the driven member including the contact surfaces is disclosed as being made of a relatively weak material (see “synthetic resin”) and the coupling 30 including the driving surface is disclosed as being comprised of a relatively strong material (see “metal”). Fig. 5 shows the rotating shaft 8 at knurled area 15 is in contact with the driven member/rotor 10, 11, 13.

Response to Arguments

11. Applicant's arguments filed November 15, 2004 have been fully considered but they are not persuasive.

- a. Applicant argues that the limitations in claim 16, lines 3 & 4 are shown in Figs. 2 & 3. However, neither of those drawings shows the pump housing 11 or its centerline. Fig.

1 actually appears to show the shaft 16 coincident with (i.e. not offset from) the centerline of the housing 11.

b. Applicant argues that the limitations in claim 16, lines 3 & 4 are described in paragraph 0023. However, there is no description of the shaft 16 being offset and parallel with the centerline of the pump housing 11 in paragraph 0023 or anywhere else in the description.

c. Applicant argues that Tang and Matsumoto each fail to anticipate the claims because the devices disclosed therein are not disclosed as being rotated and/or for use in a pump. However, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If (as in the case of both Tang and Matsumoto) the prior art structure is capable of performing the intended use, then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

d. Applicant argues that Tang fails to anticipate the claims because the threads in Tang cause distortion. However, the drawings in Tang do not show any distortion which precludes the structure in Tang from reading on the instant claims.

e. Applicant argues that Matsumoto fails to anticipate the claims because Matsumoto allegedly fails to show the rotor and shaft in contact. However, as noted in the rejection above, Fig. 5 of Matsumoto shows the rotating shaft 8 at its knurled area 15 in contact with the driven member/rotor 10, 11, 13

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hudgens and Christopher each show a pump.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
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